# Request to Archive With The National Centers for Environmental Information For Climate Normals Update 2014 Provided by NCDC/GCAD/PDB

### 2014-06-18

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Anthony Arguez
NCDC/GCAD/PDB
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2. Name the organization or group responsible for creating the dataset.

NCDC's Climate Normals Project Team - NOAA/NESDIS/NCDC/GCAD/PDB

- 3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.
- (1) Hourly normals of temperature, dew point temperature, heat index, wind chill, wind, cloudiness, heating and cooling degree hours, and pressure normals. This covers hundreds of stations. Two time period averages are included: 1981-2010 (refreshing the existing hourly Normals products) and 2001-2010 (a new 10-year average). The data collection includes product files and station inventories (one set for each time period).
- (2) Additional monthly temperature normals. Previously we provided 30-year averages of monthly, seasonal, and annual normals of maximum temperature, minimum temperature, and mean temperature for ~7500 stations. Now, we will provide several alternative measures of "normal" for these three temperature variables. These products were formerly known as "Alternative Climate Normals" but are being brought under the 1981-2010 Climate Normals umbrella. The alternative measures are 5-year, 10-year, 15-year, 20-year averages; OCN (Optimal Climate Normals); and Hinge Fit Normals. All of these alternatives would be calculated using data through 2010. Unlike the normals already archived, the OCN and Hinge Fit would be based on data before 1981 (back to 1951). The data collection includes product files and station inventories for about 5000 stations. The products are in tenths of degrees Fahrenheit.
- (3) Air freezing Index seasonal values and return periods. This work replaces the 1951-1980 analysis done at NCDC and is being added under the 1981-2010 Climate Normals umbrella (perhaps most appropriately under the Supplemental category). Technically the output values are in units known as "freezing degree days" which are essentially reported in whole degrees Fahrenheit. The data collection includes product files and station inventories for about 5000 stations.
- 4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY) From 1981 to 2010
- 5. Edition or version number(s) of the dataset:

V1 for everything EXCEPT V2 for 1981-2010 Hourly Normals

- 6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?
- (1) Derived parameters from quality-controlled ISD-Lite.
- (2) Derived parameters from quality-controlled and adjusted monthly temperature data
- (3) Derived parameters from quality-controlled and adjusted monthly temperature data and daily temperatures from GHCN-Daily
- 7. Approximate date when the dataset was or will be released to the public:

2014

8. Who are the expected users of the archived data? How will the archived data be used?

Energy companies, farmers, insurers, agribusiness, financial firms, etc.

9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

No

10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

The 1981-2010 hourly normals will replace the previous hourly normals files that were archived as part of the entire 1981-2010 Climate Normals project. The 2001-2010 hourly normals are new. The new monthly temperature normals are new but are related to the 1981-2010 temperature monthly normals. The AFI values and return periods are new, and are most closely related to the supplemental normals, especially the frost-freeze normals.

11. List the input datasets and ancillary information used to produce the data.

ISD-Lite, GHCN Daily, and a custom quality-controlled and adjusted monthly temperature data set.

12. List web pages and other links that provide information on the data.

Station inventories consistent with the 1981-2010 Climate Normals station inventories.

- 13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
- 1. http://www1.ncdc.noaa.gov/pub/data/normals/1981-2010/documentation/Hourly-Normals.pdf
- 2. http://www1.ncdc.noaa.gov/pub/data/normals/1981-2010/documentation/hourly-filenames.txt
- 3. http://www1.ncdc.noaa.gov/pub/data/normals/1981-2010/documentation/hourly-methodology.pdf
- 4. AFI manuscript currently in review
- 5. http://journals.ametsoc.org/doi/pdf/10.1175/BAMS-D-12-00155.1 (Alternative Climate Normals workshop summary)
- 14. Indicate the data file format(s).
- 1. ASCII
- 15. Are the data files compressed?

gzip

16. Provide details on how the files are named and how they are organized (e.g., file\_name\_pattern\_YYYYMM.tar in monthly aggregations).

#### e.g., hly-cldh-normal.txt

one file per variable per time period. same as 1981-2010 climate normals.

# 17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

http://www1.ncdc.noaa.gov/pub/data/normals/1981-2010/products/hourly/

similar to 1981-2010 climate normals files already archived

#### 18. What is the total data volume to be submitted?

### Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 3GB Number of Data Files: 80

# 19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

#### 20. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: Asheville, NC

System Name: dome.ncdc.noaa.gov

System Owner: NCDC

Additional Information:

- 21. What are the possible methods for submitting the data to NCEI? Select all that apply.
- 1. FTP PULL
- 2. FTP PUSH
- 22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.
- 1. User interface to order and stage data for download
- 23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

# 24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

Preserving a paper trail for posterity. Backup in case files are lost when the next round of normals need to be computed.

#### 25. Are the data archived at another facility or are there plans to do so? Please explain.

No

# 26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

No

### 27. Do you have a data management plan for your data?

No

### 28. Have funds been allocated to archive the data at NCEI?

No

## 29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

Climate Normals project

Sponsor(s): Russ Vose and/or Mike Tanner

### 30. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2014-07-31

Accessible by:

### 31. Add any other pertinent information for this request.

None